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Application No. 09/632,
Reply to Office Action of December 3, 2003

IN THE SPECIFICATION

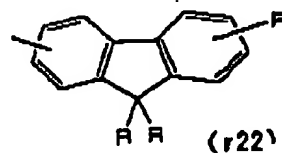
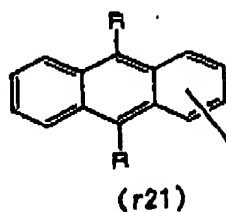
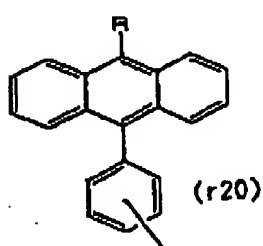
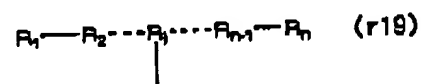
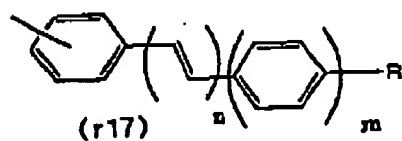
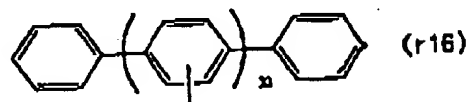
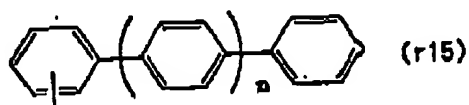
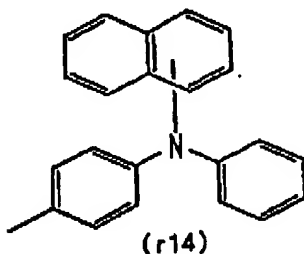
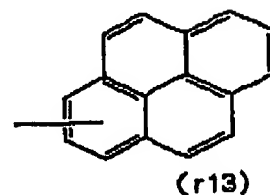
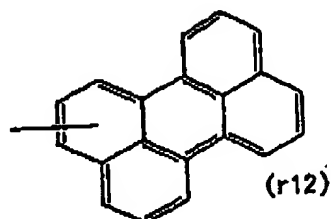
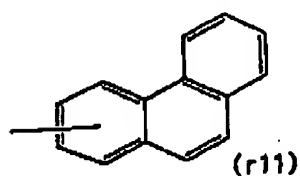
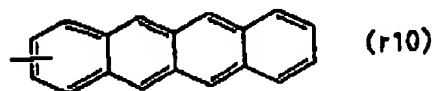
Please amend the paragraph beginning at page 8, line 10, as follows:

According to a sixth aspect of the present invention, there is provided an electroluminescent element with the structure of the fifth aspect, wherein ~~the compound R is~~ aromatic and is selected from the group consisting of phenyl, naphthyl, indenyl, fluorenyl, phenanthryl, anthranyl, pyrenyl, chrysenyl, naphthacenyl, benzophenanthrenyl, furanyl, thiophenyl, pyrrolyl, oxazolyl, isoxazolyl, pyrazolyl, triazolyl, furazanyl, pyridyl, oxazol, morpholyl, thiazyl, pyridazyl, pyrimidyl, pyrazyl, triazyl, benzofuryl, isobenzofuryl, benzothiophenyl, indolyl, isoindolyl, benzoxazolyl, benzothiazolyl, benzoimidazolyl, chromenyl, quinolyl, isoquinolyl, cinnolyl, phthalazyl, quinazolyl, quinoxalyl, dibenzofuril, carbazolyl, xanthenyl, acridinyl, phenanthridinyl, phenanthryl, phenaziny, phenoxazinyl, thianthrenyl, indoliziny, quinoliziny, naphthyridinyl, purinyl, oxadiazolyl, and oxathiazolyl; ~~>C=C< , >C=N , N=N , N(R) , O , S , SO , SO_2 , $\text{Si(R}_2\text{)}$, >C=Si< , C=C , and B(R) .~~

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Please amend the paragraph beginning at page 27, line 6, as follows:

Examples of functional units R1 and R2 can further include the compounds represented by the following chemical formulae (r10) through (r22).



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in which n, m, and l represent integers, R represents saturated hydrocarbon from C1 through C30, an isomer thereof, or an aromatic compound, such as phenyl, naphthyl, indenyl, fluorenyl, phenanthryl, anthranyl, pyrenyl, chrysenyl, naphthacenyl, benzophenanthrenyl, furanyl, thiophenyl, pyrrolyl, oxazolyl, isoxazolyl, pyrazolyl, triazolyl, ~~furazanyl~~ furazanyl, pyridyl, oxazolyl, morpholyl, thiazyl, pyridazyl, pyrimidyl, pyrazyl, triazyl, benzofuryl, isobenzofuryl, benzothiophenyl, indolyl, isoindolyl, benzoxazolyl, benzothiazolyl, benzoimidazolyl, ~~chromenyl~~ chromenyl, quinolyl, isoquinolyl, cinnolyl, phthalazyl, quinazolyl, quinoxalyl, dibenzofuryl, carbazolyl, xanthenyl, acridinyl, phenanthridinyl, phenanthryl, phenaziny, phenoxaziny, thianthrenyl, indoliziny, quinoliziny, naphthyridinyl, purinyl, ~~puritedinyl~~, oxadiazolyl, and oxathiazolyl, ~~\rightarrow C=C \leftarrow , \rightarrow C=N, N=N, N(R), O, S, SO, SO₂, Si(R₂), \rightarrow C-Si \leftarrow , and C=C.~~

Please amend the paragraph beginning at page 47, line 21, as follows:

300 mg of diiodophenyladamantane (compound 20), 510 mg of pyrenyl borate, 20 mg of Pd(PPh₃)₄, 400 mg of triethylamine, and 3 g of DMF were mixed, degassed, and then stirred and heated for 5 hours at 100°C. After DMF was removed, the mixture was separated with water-chloroform, dried with sodium sulfate, and evaporated. The mixture was purified by column chromatography (silica-chloroform:hexane = 1:2) to obtain 150 mg of ~~dipyrenyladamantane~~ dipyrenylphenyladamantane (compound 21).

Please amend the paragraph beginning at page 49, line 17, as follows:

250 mg of diiodophenyladamantane (compound 20), 510 mg of 10-(9-phenylanthryl) borate, 20 mg of Pd(PPh₃)₄, 350 mg of triethylamine, and 2.5 g of DMF were mixed, degassed, and then stirred and heated for 15 hours at 100°C. After DMF was removed, the mixture was separated with water-chloroform, dried with sodium sulfate, and evaporated.

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The mixture was purified by column chromatography (silica-chloroform:hexane = 1:3) to obtain 100 mg of ~~di(9-phenylanthryl)adamantane~~
di(9-phenylanthrylphenyl)adamantine (compound 22).

Please amend the paragraph beginning at page 51, line 2, as follows:

100 mg of diiodophenyladamantane (compound 20), 650 mg of 10-(9-trimethylsilylanthryl) borate, 20 mg of Pd(PPh₃)₄, 250 mg of triethylamine, and 3 g of DMF were mixed, degassed, and then stirred and heated for 20 hours at 100°C. After DMF was removed, the mixture was separated with water-chloroform, dried with sodium sulfate, and evaporated. The mixture was purified by column chromatography (silica-chloroform:hexane = 1:5) to obtain 75 mg of ~~di(9-trimethylsilylanthryl)adamantane~~
di(9-trimethylsilylanthrylphenyl)adamantane (compound 23).

Please amend the paragraph beginning at page 52, line 11, as follows:

150 mg of diiodophenyladamantane (compound 20), 700 mg of 10-(9-benzoxazolylanthryl) borate, 20 mg of Pd(PPh₃)₄, 350 mg of triethylamine, and 3 g of DMF were mixed, degassed, and then stirred and heated for 15 hours at 100°C. After DMF was removed, the mixture was separated with water-chloroform, dried with sodium sulfate, and evaporated. The mixture was purified by column chromatography (silica-chloroform:hexane = 1:3) to obtain 85 mg of ~~di(9-benzoxazolylanthryl) adamantane~~ di(9-benzoxazolylanthrylphenyl) adamantane(compound 24).

Please amend the paragraph beginning at page 53, line 21, as follows:

150 mg of diiodophenyladamantane (compound 20), 700 mg of 10-(9-benzothiazolylanthryl) borate, 20 mg of Pd(PPh₃)₄, 350 mg of triethylamine, and 3 g of DMF

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were mixed, degassed, and then stirred and heated for 24 hours at 100°C. After DMF was removed, the mixture was separated with water-chloroform, dried with sodium sulfate, and evaporated. The mixture was purified by column chromatography (silica-chloroform:hexane = 1:3) to obtain 85 mg of ~~di(9-benzothiazolylanthryl)adamantane~~ di(9-benzothiazolylanthrylphenyl)adamantane (compound 25).

Please amend the paragraph beginning at page 56, line 2, as follows:

200 mg of diiodophenylnorbornane (compound 26), 800 mg of 10-(9-benzothiazolylanthryl) borate, 20 mg of Pd(PPh₃)₄, 400 mg of triethylamine, and 3 g of DMF were mixed, degassed, and then stirred and heated for 32 hours at 100°C. After DMF was removed, the mixture was separated with water-chloroform, dried with sodium sulfate, and evaporated. The mixture was purified by column chromatography (silica-chloroform:hexane = 1:5) to obtain 120 mg of ~~di(9-benzothiazolylanthryl)-norbornane~~ di(9-benzothiazolylanthrylphenyl) norbornane (compound 27).

Please amend the paragraph beginning at page 57, line 15, as follows:

150 mg of diiodophenyladamantane (compound 20), 800 mg of 5-phenanthryl borate, 20 mg of Pd(PPh₃)₄, 340 mg of triethylamine, and 3 g of DMF were mixed, degassed, and then stirred and heated for 25 hours at 100°C. After DMF was removed, the mixture was separated with water-chloroform, dried with sodium sulfate, and evaporated. The mixture was purified by column chromatography (silica-chloroform:hexane = 1:3) to obtain 85 mg of ~~diphenanthryladamantane~~ diphenanthrylphenyladamantane (compound 28).